

molding a thermally conductive plastic over at least a portion of said armature to at least partially encase said magnet wires; and

molding a fan at one end of said armature from said thermally conductive plastic.

A¹ 20. (Amended) A method for forming an armature for an electric motor, said method comprising:

providing a lamination stack;

providing an armature shaft for supporting said lamination stack;

providing a commutator disposed on said armature;

winding a plurality of magnet wires around said lamination stack and securing ends of said magnet wires to said commutator;

performing a molding step to mold a thermally conductive coating over a substantial portion of said lamination stack to at least substantially encase said magnet wires therewithin, and to form a fan adjacent one end of said lamination stack from said thermally conductive coating.

A³ 24. (Amended) A method for forming an armature for an electric motor, comprising:

providing a lamination stack;

providing an armature shaft for supporting said lamination stack;

providing a commutator disposed on said armature;

winding a plurality of magnet wires around said lamination stack and securing ends of said magnet wires to said commutator;

molding a thermally conductive plastic coating over a substantial portion of said lamination stack to at least substantially encase said magnet wires therewithin, and to form a fan adjacent one end of said lamination stack from said thermally conductive plastic coating, and wherein said thermally conductive plastic coating has a density approximately equal to said magnet wires, to thereby substantially eliminate the need to balance said armature prior to assembling said armature to form said electric motor.

Please add the following claims.

25. (New) An electric motor comprising:

a stator;

an armature having an armature shaft and being disposed within said stator, wherein said armature includes a plurality of slots;

a plurality of magnet wires formed in a plurality of coils and disposed in said slots to at least partially occupy said slots; and

a flowable plastic having a density substantially similar to said magnet wires for at least substantially filling a remainder of an area of each of said slots to balance said armature.

26. (New) The motor of claim 25, wherein said flowable plastic comprises a thermally conductive, flowable plastic.

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27. (New) The motor of claim 25, wherein said flowable plastic comprises a plastic having a consistency enabling said flowable plastic to be injected into said slots during an injection molding process.

24 cont.

28. (New) An electric motor comprising:

a stator;

an armature including a plurality of axial slots;

a plurality of magnet wires formed in a plurality of coils and disposed in said slots to at least partially occupy said slots; and

an injectable resin injected into said slots to at least substantially fill said slots, said resin having a density substantially similar to said magnet wires to balance said armature.

29. (New) The motor of claim 28, wherein said injectable resin comprises a thermally conductive resin.

30. (New) The motor of claim 28, wherein said injectable resin comprises a flowable plastic resin.

Adapt.

31. (New) A method for forming an armature for an electric motor, said method comprising:

providing a lamination stack having a plurality of axial slots arranged circumferentially therearound;

disposing a plurality of magnet wires in said axial slots; and

filling said axial slots with a resin having a density substantially similar to a density of said magnet wires to thereby balance said lamination stack.

32. (New) The method of claim 31, wherein filling said axial slots with a resin comprises filling said axial slots with a thermally conductive resin.

33. (New) The method of claim 31, wherein filling said axial slots with a resin comprises filling said axial slots with a flowable resin during an injection molding process.

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34. (New) A method for forming an armature for an electric motor, said method comprising:

forming a lamination stack having a plurality of axial slots arranged circumferentially therearound;

winding a plurality of magnet wires in said axial slots;

filling said axial slots with an injectable plastic having a density substantially similar to a density of said magnet wires to thereby balance said lamination stack.

35. (New) The method of claim 34, wherein said injectable plastic comprises a thermally conductive, flowable resin injected into said slots during an injection molding process.

36. (New) A method for forming an armature for an electric motor which substantially or entirely eliminates a need to dynamically balance said armature prior to final assembly of said motor, said method comprising:

forming a lamination stack having a plurality of parallel slots formed therearound;

disposing a plurality of magnet wires in said slots; and

at least substantially filling each of said slots with a flowable resin having a density at least substantially similar to said magnet wires to thereby balance said armature without the need for a subsequent dynamic balancing step to be performed on said armature.

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37. (New) The method of claim 36, wherein filling each of said slots with a flowable resin comprises filling said slots with a thermally conductive plastic.

24
Contd.

38. (New) A method for balancing an armature of an electric motor during manufacture of said armature, comprising:

forming a lamination stack having a plurality of parallel slots arranged therearound;

disposing a plurality of magnet wires in said slots to partially fill said slots;

at least substantially filling a remainder of an area of each of said slots with a flowable resin having a density substantially equal to a density of said magnet wires to thereby balance said lamination stack.

39. (New) The method of claim 38, wherein said flowable resin comprises a thermally conductive resin adapted to be injected into said slots during an injection molding process.

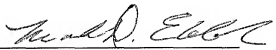
Remarks

Claims 16, 20 and 24 have been amended. New claims 25-38 have been added to the present application. It is believed that these claims are all in form for allowance and such action is respectfully requested at the Examiner's earliest convenience. If the Examiner should have any questions regarding this matter it is requested that the undersigned be contacted to discuss same.

Respectfully submitted,

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